

PTO/SP-001 (0-01)

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

#7
RECEIVED
FEB 13 2003
GROUP 3600

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/489,657
		Filing Date	JANUARY 21, 2000
		First Named Inventor	RAYMOND A. JOAO
		Art Unit	3628
		Examiner Name	D. KEE
Sheet	1 of 7	Attorney Docket Number	JB008

U.S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
MM		US- 5,038,284	08-06-1991	KRAMER	
		US- 5,708,422	01-13-1998	BLONDER, ET AL.	
		US- 5,668,876	09-16-1997	FALK, ET AL.	
		US- 5,615,110	03-25-1997	WONG	
		US- 3,938,090	02-10-1976	BORISON, ET AL.	
		US- 5,173,594	12-22-1992	MCCLURE	
		US- 5,473,667	12-05-1995	NEUSTEIN	
		US- 3,723,655	03-27-1973	ZUCKER, ET AL.	
		US- 5,485,510	01-16-1996	COLBERT	
		US- 5,406,619	04-11-1995	AKHTERUZZAMAN, ET AL.	
		US- 5,444,616	08-22-1995	NAIR, ET AL.	
		US- 5,513,250	04-30-1996	MCALLISTER	
		US- 4,485,300	11-27-1984	PEIRCE	
		US- 4,758,714	07-19-1988	CARLSON, ET AL.	
		US- 4,947,027	08-07-1990	GOLIGHTLY	
		US- 5,357,563	10-18-1994	HAMILTON, ET AL.	
		US- 5,526,407	06-11-1996	RUSSELL, ET AL.	
		US- 5,243,645	09-07-1993	BISSELL, ET AL.	
		US- 5,444,763	08-22-1995	LAZARIDIS, ET AL.	
		US- 5,479,510	12-26-1995	OLSEN, ET AL.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴ - Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	4-09-03
-----------------------	--	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Approved for use through 10/31/2002 OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

(use as many sheets as necessary)

Sheet 2 of 7

Complete if Known

Application Number	09/489,657
Filing Date	JANUARY 21, 2000
First Named Inventor	RAYMOND A. JOAO
Art Unit	3628
Examiner Name	D. KEE
Attorney Docket Number	JB008

Examiner Initials	Cite No.	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)	MM-DD-YYYY	Applicant of Cited Document	
<i>[Handwritten marks]</i>		US-5,699,528	12-16-1997	HOGAN	
		US-5,655,007	08-05-1997	MCALLISTER	
		US-5,631,947	05-20-1997	WITTSTEIN, ET AL.	
		US-5,661,285	08-26-1997	ELRICK, ET AL.	
		US-5,345,595	09-06-1994	JOHNSON, ET AL.	
		US-5,335,278	08-02-1994	MATCHETT, ET AL.	
		US-5,177,342	01-05-1993	ADAMS	
		US-5,530,438	06-25-1996	BICKHAM, ET AL.	
		US-5,606,361	02-25-1997	DAVIDSOHN, ET AL.	
		US-5,724,092	03-03-1998	DAVIDSOHN, ET AL.	
<i>[Handwritten mark]</i>		US-4,554,418	11-19-1985	TOY	
		US-4,706,275	11-10-1987	KAMIL	
		US-6,202,054	03-13-2001	LAWLOR, ET AL.	
		US-5,870,724	02-09-1999	LAWLOR, ET AL.	
		US-			
		US-			
	US-				
	US-				
	US-				
	US-				

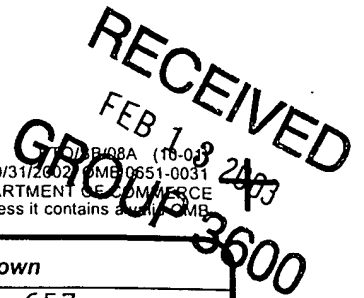
[illegible]

Date Considered

4-09-03

1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.



U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

(use as many sheets as necessary)

Sheet 3 of 7

Complete if Known

Application Number	09/489,657
Filing Date	JANUARY 21, 2000
First Named Inventor	RAYMOND A. JOAO
Art Unit	3628
Examiner Name	D. KEE
Attorney Docket Number	JB008

Examiner Initials*	Cite No. 1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code 2 (if known)			
ML		us5,453,601	09-26-1995	ROSEN	
		us5,642,419	06-24-1997	ROSEN	
		us5,621,797	04-15-1997	ROSEN	
		us5,557,518	09-17-1996	ROSEN	
		us5,455,407	10-03-1995	ROSEN	
		us4,877,950	10-31-1989	HALPERN	
		us4,992,646	02-12-1991	COLLIN	
		us5,030,806	07-09-1991	COLLIN	
		us5,221,838	06-22-1993	GUTMAN, ET AL.	
		us5,521,362	05-28-1996	POWERS	
		us5,534,683	07-09-1996	RANKL, ET AL.	
		us5,438,184	08-01-1995	ROBERTS, ET AL.	
		us5,623,547	04-22-1997	JONES, ET AL.	
		us4,977,595	12-11-1990	OHTA, ET AL.	
		us5,224,162	06-29-1993	OKAMOTO, ET AL.	
		us5,511,121	04-23-1996	YACOBI	
		us5,903,830	05-11-1999	JOAO, ET AL.	
		us5,878,337	03-02-1999	JOAO, ET AL.	
ML		us6,047,270	04-04-2000	JOAO, ET AL.	
		us-			

[illegible]

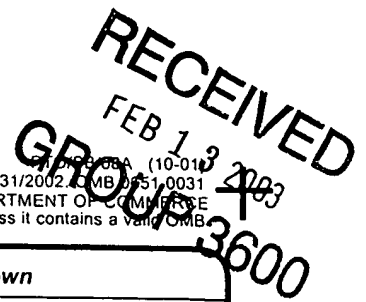
Examiner
Signature

Date
Considered

4-09-03

¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.



Approved for use through 10/31/2002. OMB 051-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
red to respond to a collection of information unless it contains a valid OMB

Substitute for form 1449A/PTO

(use as many sheets as necessary)

Sheet	4	of	7
-------	---	----	---

Complete if Known

Application Number	09/489,657
Filing Date	JANUARY 21, 2000
First Named Inventor	RAYMOND A. JOAO
Art Unit	3628
Examiner Name	D. KEE
Attorney Docket Number	JB008

Examiner Initials	Cite No. 1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
Pat		us5,621,201	04-15-1997	LANGHANS, ET AL.	
		us5,220,501	06-15-1993	LAWLOR, ET AL.	
		us5,839,063	11-17-1998	LEE	
		us5,265,033	11-23-1993	VAJK, ET AL.	
		us5,473,143	12-05-1995	VAK, ET AL.	
		us6,192,113	02-20-2001	LORSCH	
		us5,988,497	11-23-1999	WALLACE	
		us5,903,633	05-11-1999	LORSCH	
		us5,719,926	02-17-1998	HILL	
		us5,825,863	10-20-1998	WALKER	
		us5,777,306	07-07-1998	MASUDA	
		us5,640,447	06-17-1997	FONSECA	
		us5,719,926	02-17-1998	HILL	
		us5,638,430	06-10-1997	HOGAN, ET AL.	
		us5,621,787	04-15-1997	MCKOY, ET AL.	
		us5,563,934	10-08-1996	EDA	
		us5,559,871	09-24-1996	SMITH	
		us5,546,446	08-13-1996	TSUNOKAWA, ET AL.	
Pat		us5,511,114	04-23-1996	STIMSON, ET AL.	
		us5,450,477	09-12-1995	AMARANT, ET AL.	

[illegible]

Examiner
Signature

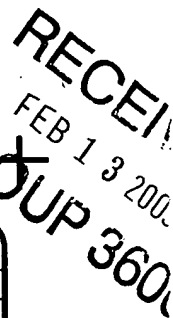
Date Considered

4-09-03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.




Approved for use through 10/31/2002 OMB 06515-02

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	09/489,657
				Filing Date	JANUARY 21, 2000
				First Named Inventor	RAYMOND A. JOAO
				Art Unit	3628
				Examiner Name	D. KEE
				Attorney Docket Number	JB008
Sheet	5	of	7		

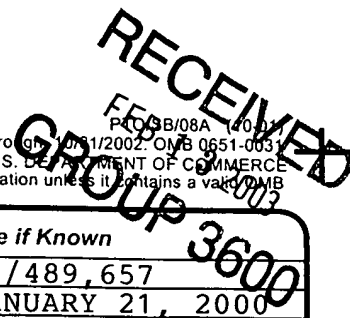
[illegible][illegible]

Examiner Signature		Date Considered	4-09-03
-----------------------	---	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.



Approved for use through 10/31/2007 OMB 0651-0021

U.S. Patent and Trademark Office: U.S. PATENT AND TRADEMARK OFFICE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/489,657
				Filing Date	JANUARY 21, 2000
				First Named Inventor	RAYMOND A. JOAO
				Art Unit	3628
				Examiner Name	D. KEE
				Attorney Docket Number	JB008
Sheet	6	of	7		

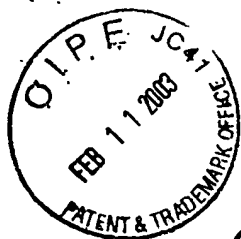
[illegible][illegible]

Examiner Signature		Date Considered	4-09-03
-----------------------	---	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0951-003

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Contains a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/489,657
		Filing Date	JANUARY 21, 2000
		First Named Inventor	RAYMOND A. JOAO
		Group Art Unit	3628
		Examiner Name	D. KEE
		Attorney Docket Number	JB008
Sheet	7	of	7

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
MM		BRUCE SCHNEIER, APPLIED CRYPTOGRAPHY, 1996, Second Edition, WILEY, U.S.A.	
MM		RAYMOND B. PANKO, BUSINESS DATA COMMUNICATIONS, 1997, PRENTICE HALL, U.S.A.	
MM		SIMSON GARFINKEL, ET AL., WEB SECURITY & COMMERCE, 1997, O'REILLY & ASSOCIATES, INC., U.S.A.	
MM		LESLIE L. LESNICK, ET AL., CREATING COOL INTELLIGENT AGENTS FOR THE NET, 1997, IDG BOOKS WORLDWIDE, INC. U.S.A.	
MM		NABIL R. ADAM, ET AL., ELECTRONIC COMMERCE TECHNICAL, BUSINESS, AND LEGAL ISSUES, 1999, PRENTICE HALL PTR, U.S.A.	
MM		ALPER CAGLAYAN, ET AL., AGENT SOURCEBOOK A COMPLETE GUIDE TO DESKTOP, INTERNET, AND INTRANET AGENTS, 1997, WILEY, U.S.A.	

Examiner Signature		Date Considered	4-09-03
-----------------------	--	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.